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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=3; day=14; hr=16; min=39; sec=12; ms=131; ]

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Reviewer Comments:

<120>

Novel interaction between proteins, and therapeutic agent for disuse muscular atrophy or method associated with disuse muscular atrophy taking advantage of novel interaction

Please move the first line of the invention title to the <120> line. The lines exceed the Sequence Rules' required 72-character line limit (this includes white spaces). Please adjust the lines.

<210> 1

<211> 213

<212> PRT

<213> Homo sapiens

<220>

<223> ZNF216(Zub 1)

<400> 1

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Gln | Glu | Thr | Asn | Gln | Thr | Pro | Gly | Pro | Met | Leu | Cys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Thr | Gly | Cys | Gly | Phe | Tyr | Gly | Asn | Pro | Arg | Thr | Asn | Gly | Met | Cys |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Ser | Val | Cys | Tyr | Lys | Glu | His | Leu | Gln | Arg | Gln | Gln | Asn | Ser | Gly |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Arg | Met | Ser | Pro | Met | Gly | Thr | Ala | Ser | Gly | Ser | Asn | Ser | Pro | Thr |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ser | Asp | Ser | Ala | Ser | Val | Gln | Arg | Ala | Asp | Thr | Ser | Leu | Asn | Asn |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Cys | Glu | Gly | Ala | Ala | Gly | Ser | Thr | Ser | Glu | Lys | Ser | Arg | Asn | Val |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Pro | Val | Ala | Ala | Leu | Pro | Val | Thr | Gln | Gln | Met | Thr | Glu | Met | Ser |

|                                     |     |                         |     |  |     |
|-------------------------------------|-----|-------------------------|-----|--|-----|
|                                     | 95  |                         | 100 |  | 105 |
| Ile Ser Arg Glu Asp Lys Ile Thr Thr |     | Pro Lys Thr Glu Val Ser |     |  |     |
|                                     | 110 |                         | 115 |  | 120 |
| Glu Pro Val Val Thr Gln Pro Ser Pro |     | Ser Val Ser Gln Pro Ser |     |  |     |
|                                     | 125 |                         | 130 |  | 135 |
| Thr Ser Gln Ser Glu Glu Lys Ala Pro |     | Glu Leu Pro Lys Pro Lys |     |  |     |
|                                     | 140 |                         | 145 |  | 150 |
| Lys Asn Arg Cys Phe Met Cys Arg Lys |     | Lys Val Gly Leu Thr Gly |     |  |     |
|                                     | 155 |                         | 160 |  | 165 |
| Phe Asp Cys Arg Cys Gly Asn Leu Phe |     | Cys Gly Leu His Arg Tyr |     |  |     |
|                                     | 170 |                         | 175 |  | 180 |
| Ser Asp Lys His Asn Cys Pro Tyr Asp |     | Tyr Lys Ala Glu Ala Ala |     |  |     |
|                                     | 185 |                         | 190 |  | 195 |
| Ala Lys Ile Arg Lys Glu Asn Pro Val |     | Val Val Ala Glu Lys Ile |     |  |     |
|                                     | 200 |                         | 205 |  | 210 |
| Gln Arg Ile                         |     |                         |     |  |     |
| 213                                 |     |                         |     |  |     |

Please removed the above "213": the amino acids are numbered under every 5 amino acids. Same error in Sequence 2.

```

<210> 5
<211> 70
<212> RNA
<213> Homo sapiens
<220>
<223> siRNA of AWP1
<400> 5
ggatcccatg gcatgtgttc agtatgttca agagacatac tgaacacatg    50
ccattttttt ggaagtcgac    70

```

t's are not permitted in a <212> RNA sequence. For a combined DNA/RNA sequence, use <212> DNA and explain in the <220>-<223> section that it is a combined DNA/RNA sequence.

\*\*\*\*\*

Application No: 10581969 Version No: 1.0

Input Set:

Output Set:

**Started:** 2008-02-27 16:16:41.653  
**Finished:** 2008-02-27 16:16:44.927  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 274 ms  
**Total Warnings:** 0  
**Total Errors:** 24  
**No. of SeqIDs Defined:** 5  
**Actual SeqID Count:** 5

| Error code | Error Description                                              |
|------------|----------------------------------------------------------------|
| E 201      | Mandatory field data missing in <120>                          |
| E 323      | Invalid/missing amino acid numbering SEQID (1)at Protein (213) |
| E 323      | Invalid/missing amino acid numbering SEQID (2)at Protein (208) |
| E 256      | 't' found in RNA; POS (4) SEQID(5)                             |
| E 256      | 't' found in RNA; POS (9) SEQID(5)                             |
| E 256      | 't' found in RNA; POS (14) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (16) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (18) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (19) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (23) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (25) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (27) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (28) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (38) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (41) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (49) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (54) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (55) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (56) SEQID(5)                            |
| E 256      | 't' found in RNA; POS (57) SEQID(5)                            |

**Input Set:**

**Output Set:**

**Started:** 2008-02-27 16:16:41.653  
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**No. of SeqIDs Defined:** 5  
**Actual SeqID Count:** 5

| Error code | Error Description                                                                                        |
|------------|----------------------------------------------------------------------------------------------------------|
| E 256      | 't' found in RNA; POS (58) SEQID(5)                                                                      |
| E 256      | 't' found in RNA; POS (59) SEQID(5)                                                                      |
| E 256      | 't' found in RNA; POS (60) SEQID(5)<br>This error has occurred more than 20 times, will not be displayed |

<110>Natsume, Tohru  
Watanabe, Ken

Novel interaction between proteins, and therapeutic agent for disuse muscular atrophy or method associated with disuse muscular atrophy taking advantage of novel interaction  
<130> 039371-17

[illegible]

Met Ala Gln Glu Thr Asn His Ser Gln Val Pro Met Leu Cys Ser

|                 |                     |                 |         |
|-----------------|---------------------|-----------------|---------|
| 1               | 5                   | 10              | 15      |
| Thr Gly Cys Gly | Phe Tyr Gly Asn Pro | Arg Thr Asn Gly | Met Cys |
|                 | 20                  | 25              | 30      |
| Ser Val Cys Tyr | Lys Glu His Leu Gln | Arg Gln Asn Ser | Ser Asn |
|                 | 35                  | 40              | 45      |
| Gly Arg Ile Ser | Pro Pro Ala Thr Ser | Val Ser Ser Leu | Ser Glu |
|                 | 50                  | 55              | 60      |
| Ser Leu Pro Val | Gln Cys Thr Asp Gly | Ser Val Pro Glu | Ala Gln |
|                 | 65                  | 70              | 75      |
| Ser Ala Leu Asp | Ser Thr Ser Ser Ser | Met Gln Pro Ser | Pro Val |
|                 | 80                  | 85              | 90      |
| Ser Asn Gln Ser | Leu Leu Ser Glu Ser | Val Ala Ser Ser | Gln Leu |
|                 | 95                  | 100             | 105     |
| Asp Ser Thr Ser | Val Asp Lys Ala Val | Pro Glu Thr Glu | Asp Val |
|                 | 110                 | 115             | 120     |
| Gln Ala Ser Val | Ser Asp Thr Ala Gln | Gln Pro Ser Glu | Glu Gln |
|                 | 125                 | 130             | 135     |
| Ser Lys Ser Leu | Glu Lys Pro Lys Gln | Lys Lys Asn Arg | Cys Phe |
|                 | 140                 | 145             | 150     |
| Met Cys Arg Lys | Lys Val Gly Leu Thr | Gly Phe Glu Cys | Arg Cys |
|                 | 155                 | 160             | 165     |
| Gly Asn Val Tyr | Cys Gly Val His Arg | Tyr Ser Asp Val | His Asn |
|                 | 170                 | 175             | 180     |
| Cys Ser Tyr Asn | Tyr Lys Ala Asp Ala | Ala Glu Lys Ile | Arg Lys |
|                 | 185                 | 190             | 195     |
| Glu Asn Pro Val | Val Val Gly Glu Lys | Ile Gln Lys Ile |         |
|                 | 200                 | 205             | 208     |

<210> 3

<211> 642

<212> DNA

<213> Homo sapiens

<220>

<223> ZNF216

<400> 3

|            |            |            |            |             |     |
|------------|------------|------------|------------|-------------|-----|
| atggctcagg | agactaacca | gaccccgagg | cccatgctgt | gtagcacagg  | 50  |
| atgtggcttt | tatggaaatc | ctaggacaaa | tggaaatgtg | tcagtttgct  | 100 |
| acaaagaaca | tcttcagagg | cagcaaaata | gtggcagaat | gagcccaatg  | 150 |
| gggacagcta | gtggttccaa | cagtcctacc | tcagattctg | catctgtaca  | 200 |
| gagagcagac | actagcttaa | acaactgtga | aggtgctgct | ggcagcacat  | 250 |
| ctgaaaaatc | aagaaatgtg | cctgtggctg | ccttgccctg | aactcagcaa  | 300 |
| atgacagaaa | tgagcatttc | aagagaggac | aaaataacta | ccccgaaaac  | 350 |
| agaggtgtca | gagccagttg | tcactcagcc | cagtccatca | gtttctcagc  | 400 |
| ccagtacttc | tcagagtga  | gaaaaagctc | ctgaattgcc | caaaccaaaag | 450 |
| aaaaacagat | gtttcatgtg | cagaaagaaa | gttggctcta | cagggtttga  | 500 |
| ctgccgatgt | ggaaatttgt | tttgtggact | tcaccgttac | tctgacaagc  | 550 |
| acaactgtcc | gtatgattac | aaagcagaag | ctgcagcaaa | aatcagaaaa  | 600 |
| gagaatccag | ttgttgtggc | tgaaaaaatt | cagagaatat | aa          | 642 |

<210> 4

<211> 627

<212> DNA

<213> Homo sapiens

<220>

<223> AWP1

<400> 4

|            |            |            |            |            |    |
|------------|------------|------------|------------|------------|----|
| atggctcaag | aaactaatca | cagccaagtg | cctatgcttt | gttccactgg | 50 |
|------------|------------|------------|------------|------------|----|

```

ctgtggattt tatggaaacc ctcgtaaaa tggcatgtgt tcagtatgct 100
ataaagaaca tcttcaaaga cagaatagta gtaatggtag aataagccca 150
cctgcaacct ctgtcagtag tctgtctgaa tctttaccag ttcaatgcac 200
agatggcagt gtgccagaag cccagtcagc attagactct acatcttcat 250
ctatgcagcc cagccctgta tcaaatacagt cacttttata agaatactgta 300
gcatcttctc aattggacag tacatctgtg gacaaagcag tacctgaaac 350
agaagatgtg caggcttcag tatcagacac agcacagcag ccactctgaag 400
agcaaagcaa gtctcttgaa aaaccgaaac aaaaaagaa tcgctgtttc 450
atgtgcagga agaaagtggg acttactggg tttgaatgcc ggtgtggaaa 500
tgtttactgt ggtgtacacc gttactcaga tgtacacaat tgctcttaca 550
attacaaagc cgatgctgct gagaaaatca gaaaagaaaa tccagtagtt 600
gttgggtgaaa agatccaaaa gatttga 627

```

<210> 5

<211> 70

<212> RNA

<213> Homo sapiens

<220>

<223> siRNA of AWP1

<400> 5

```

ggatcccatg gcatgtgttc agtatgttca agagacatac tgaacacatg 50
ccattttttt ggaagtcgac 70

```